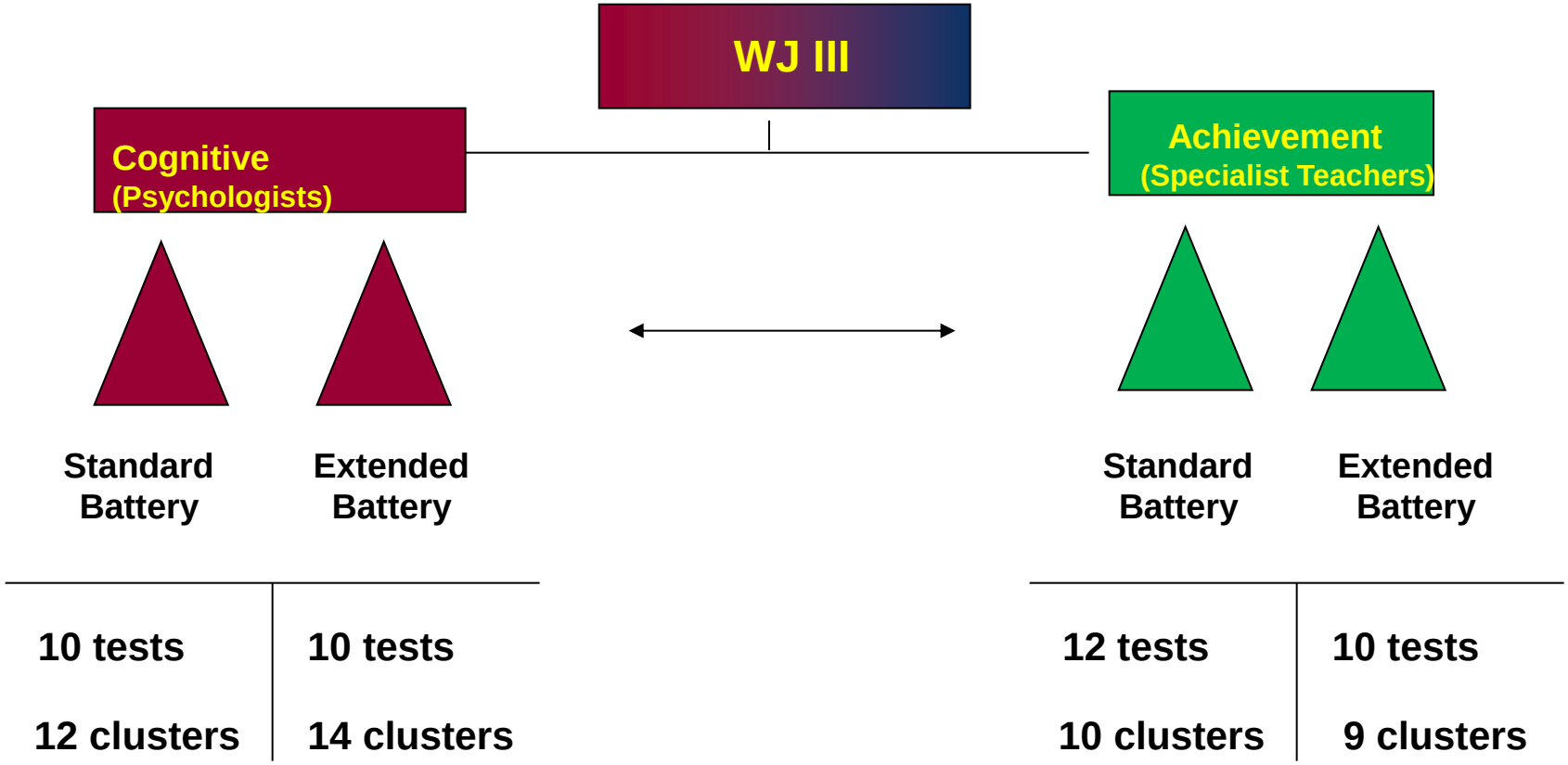
WOODCOCK JOHNSON THIRD EDITION

TESTS OF ACHIEVEMENT

Walter Howe
Psychological Assessments Australia
SPA Conference, Perth
September 2015

PSYCHOLOGICAL ASSESSMENTS AUSTRALIA

WJ III


WJ III
Cognitive
(Psychologists)
Achievement
(Specialist Teachers)
Standard Battery
Extended Battery
Standard Battery
Extended Battery
10 tests
12 clusters
10 tests
14 clusters
12 tests
10 clusters
10 tests
9 clusters

Organisation of 22 Achievement Tests

Standard Battery

Letter-Word Identification
Reading Fluency
Passage Comprehension
Story Recall
Understanding Directions
Calculation
Maths Fluency
Applied Problems
Spelling
Writing Fluency
Writing Samples
Story Recall-Delayed
Handwriting Legibility Scale

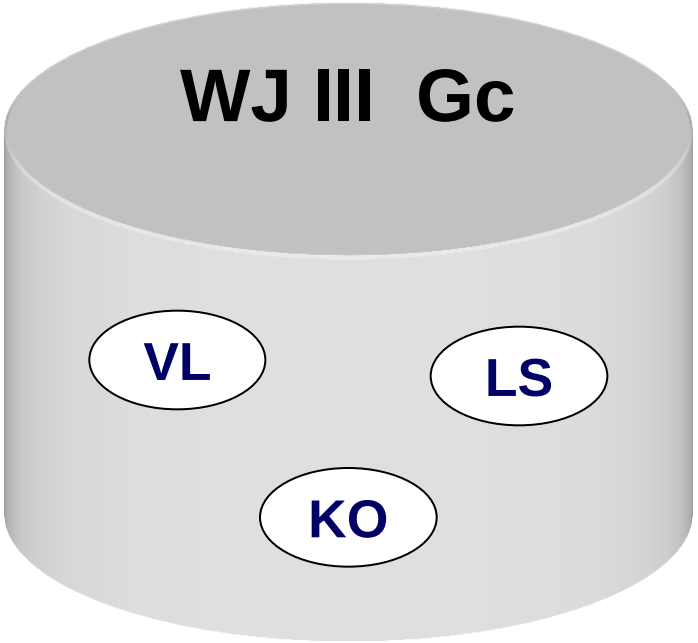
Extended Battery

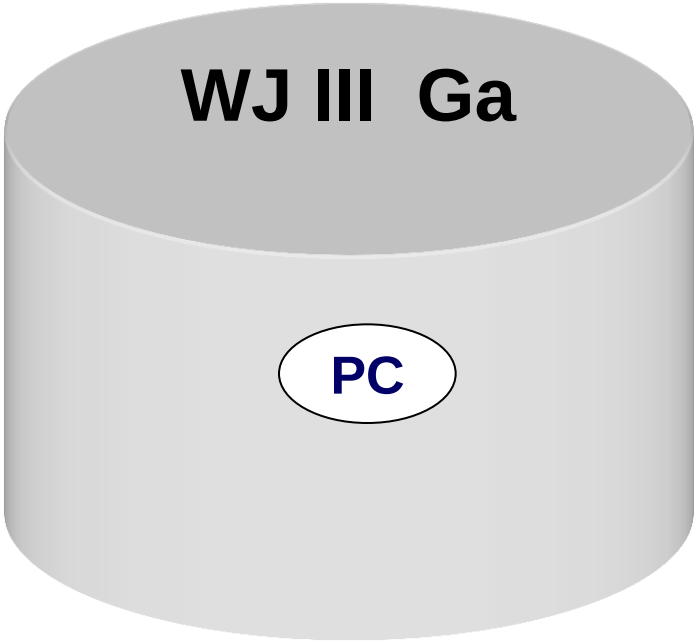
Word Attack
Reading Vocabulary
Picture Vocabulary
Oral Comprehension
Quantitative Concepts
Editing
Academic Knowledge
Spelling of Sounds
Sound Awareness
Punctuation and Capitalisation

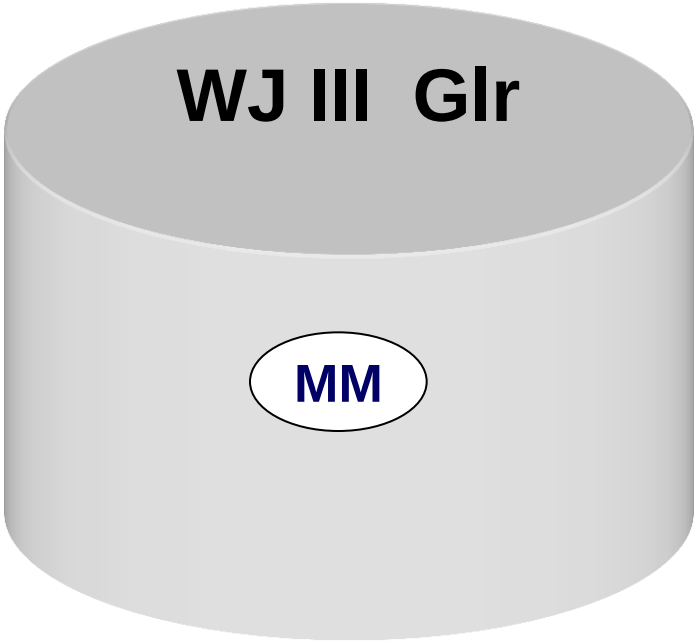
Selective Testing Table

Located in Test Books and Examiner Manual

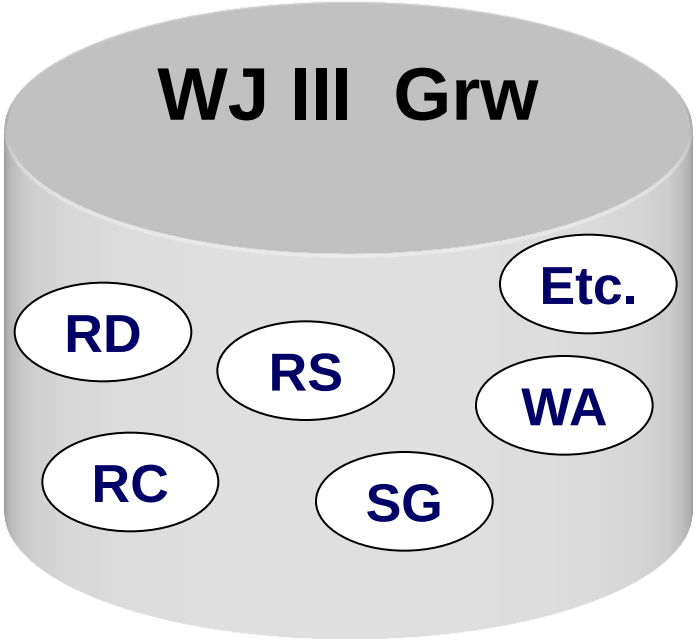
	Tests of Achievement	Reading			Oral Language				Math						Written Lang.		Other Clusters			
		Broad Reading	Basic Reading Skills	Reading Comprehension	Oral Language–Standard	Oral Language–Extended	Listening Comprehension	Oral Expression	Broad Math	Math Calculation Skills	Math Reasoning	Broad Written Language	Basic Writing Skills	Written Expression	Academic Knowledge	Phoneme/Grapheme Knowledge	Academic Skills	Academic Fluency	Academic Applications	Total Achievement
Standard Battery	Test 1: Letter-Word Identification	■	■														■			■
	Test 2: Reading Fluency	■																■		■
	Test 3: Story Recall				■	■		■												
	Test 4: Understanding Directions				■	■	■													
	Test 5: Calculation								■	■							■			■
	Test 6: Math Fluency								■	■								■		■
	Test 7: Spelling											■	■				■			■
	Test 8: Writing Fluency											■		■				■		■
	Test 9: Passage Comprehension	■		■															■	■
	Test 10: Applied Problems								■		■								■	■
	Test 11: Writing Samples											■		■					■	■
	Test 12: Story Recall–Delayed																			
Extended Battery	Test 13: Word Attack		■													■				
	Test 14: Picture Vocabulary					■		■												
	Test 15: Oral Comprehension					■	■													
	Test 16: Editing												■							
	Test 17: Reading Vocabulary			■																
	Test 18: Quantitative Concepts										■									
	Test 19: Academic Knowledge														■					
	Test 20: Spelling of Sounds															■				
	Test 21: Sound Awareness																			
	Test 22: Punctuation & Capitalization																			







The WJ III Achievement Battery includes additional measures of Gc (Oral Language tests), Ga (Auditory Processing), and Glr (Long-term storage and retrieval)

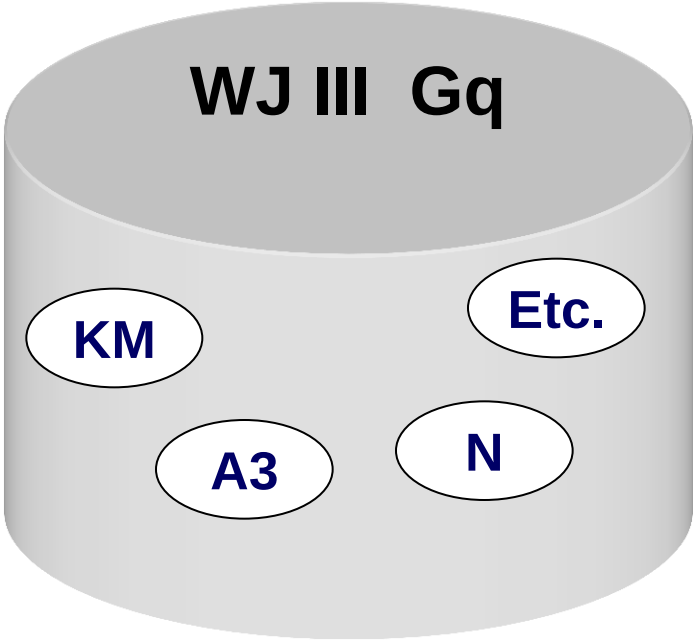


- The breadth and depth of a persons acquired store of declarative and procedural reading and writing skills and knowledge.
- Includes both basic skills (e.g., reading and spelling of single words) and the ability to read and write complex connected discourse (e.g., reading comprehension and the ability to write a story).

Practical division

Grw-Reading (*Grw-R*)

Grw-Writing (*Grw-W*)



- Ability to manipulate numeric symbols and to reason procedurally with quantitative information and relations
- Store of quantitative declarative and procedural knowledge
- Math achievement and knowledge

Mathematical Knowledge (KM): Range of general knowledge about mathematics. Not the performance of mathematical operations or the solving of math problems.

Math Achievement (A3): Measured (tested) mathematics achievement.

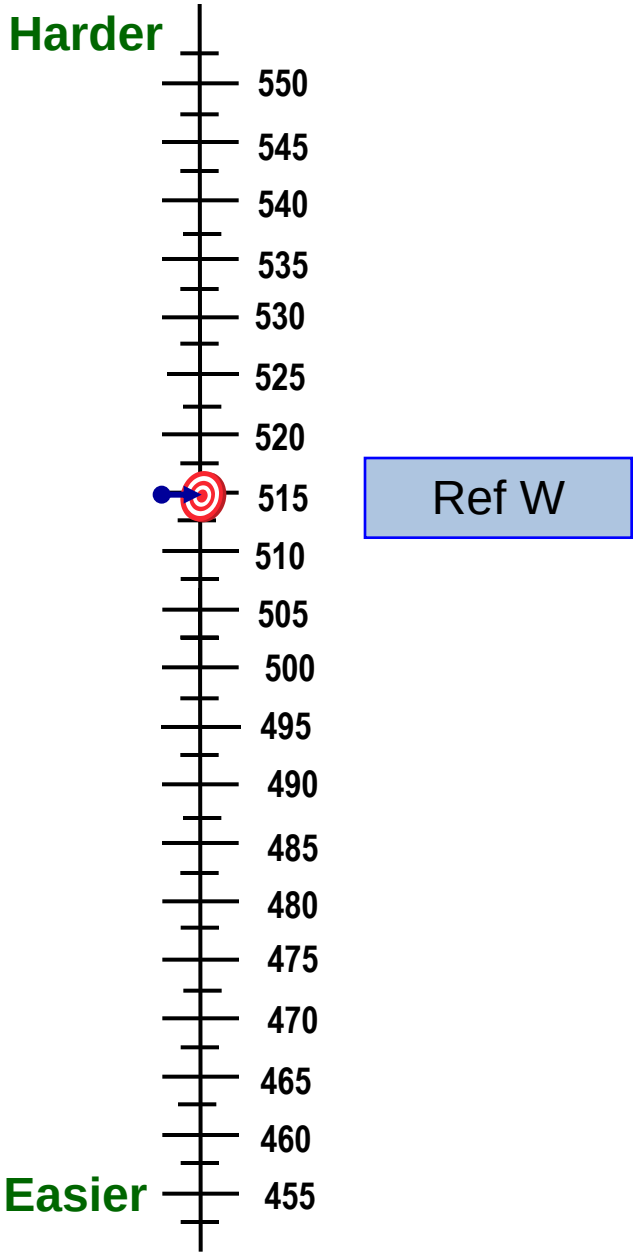
Number Facility (N): Ability to rapidly perform basic arithmetic (i.e., add, subtract, multiply, divide) and accurately manipulate numbers quickly. N does not involve understanding or organizing mathematical problems and is not a major component of mathematical/quantitative reasoning or higher mathematical skills. Also under Gs.

Levels of Interpretive Information in the WJ III

Level 1	Qualitative, informal, error analysis. observations	Useful for instructional planning Useful for behavioral observations
Level 2	Level of Development Level of Instruction	Age Equivalent Grade Equivalent
Level 3	Level of Proficiency Easy to Difficult Range	Relative Proficiency Index, Developmental/Instructional Zone
Level 4	Relative Standing in Group Rank Order	Standard Scores Percentile Ranks

Reference W

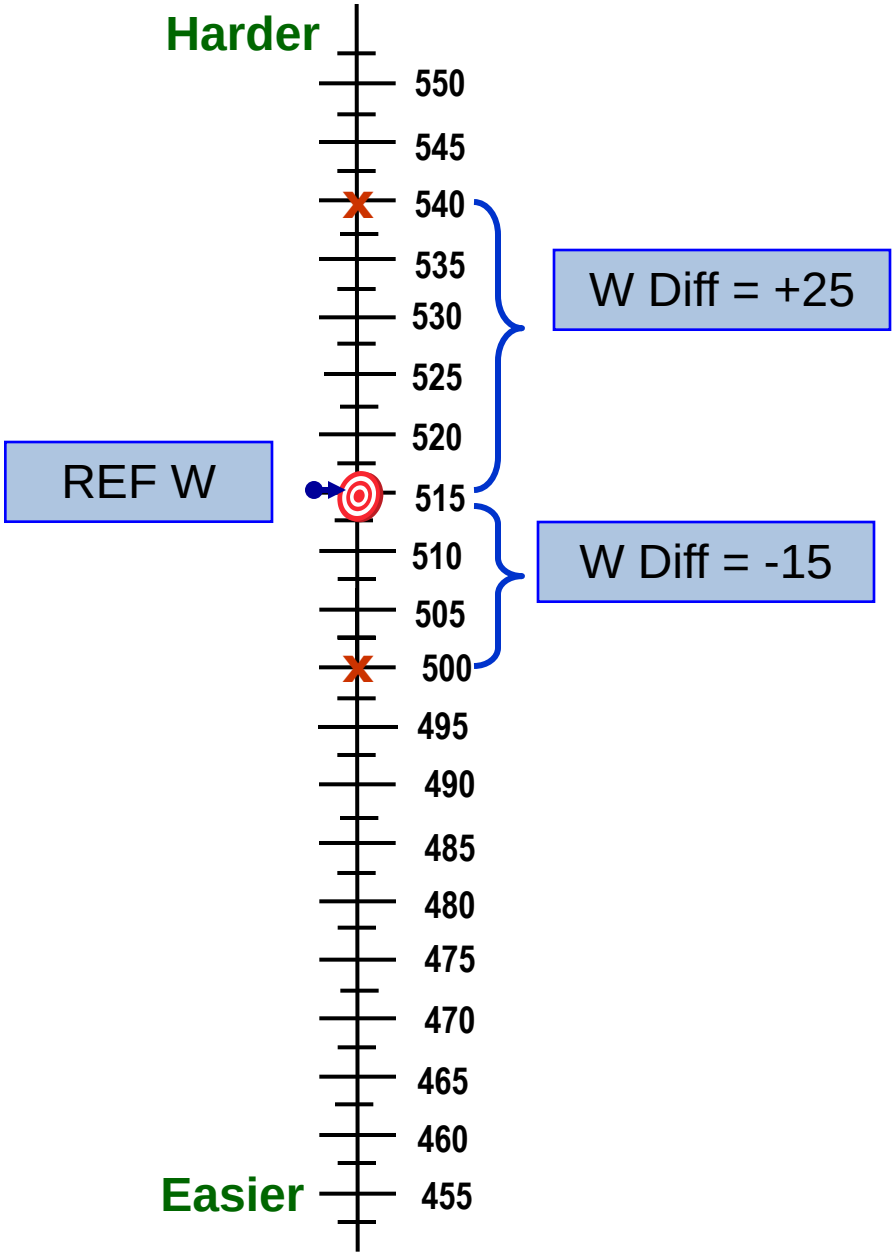
The median performance for the peer group (age or grade) on a specific test.



Adapted from Lynne Jaffe's RPI Presentation

W Difference (W Diff)

The difference between the Ref W and the person's performance (W ability) on the test.



© Walter Howe September 2014 - QUT

Adapted from Lynne Jaffe's RPI Presentation

Developmental or Instructional Zones

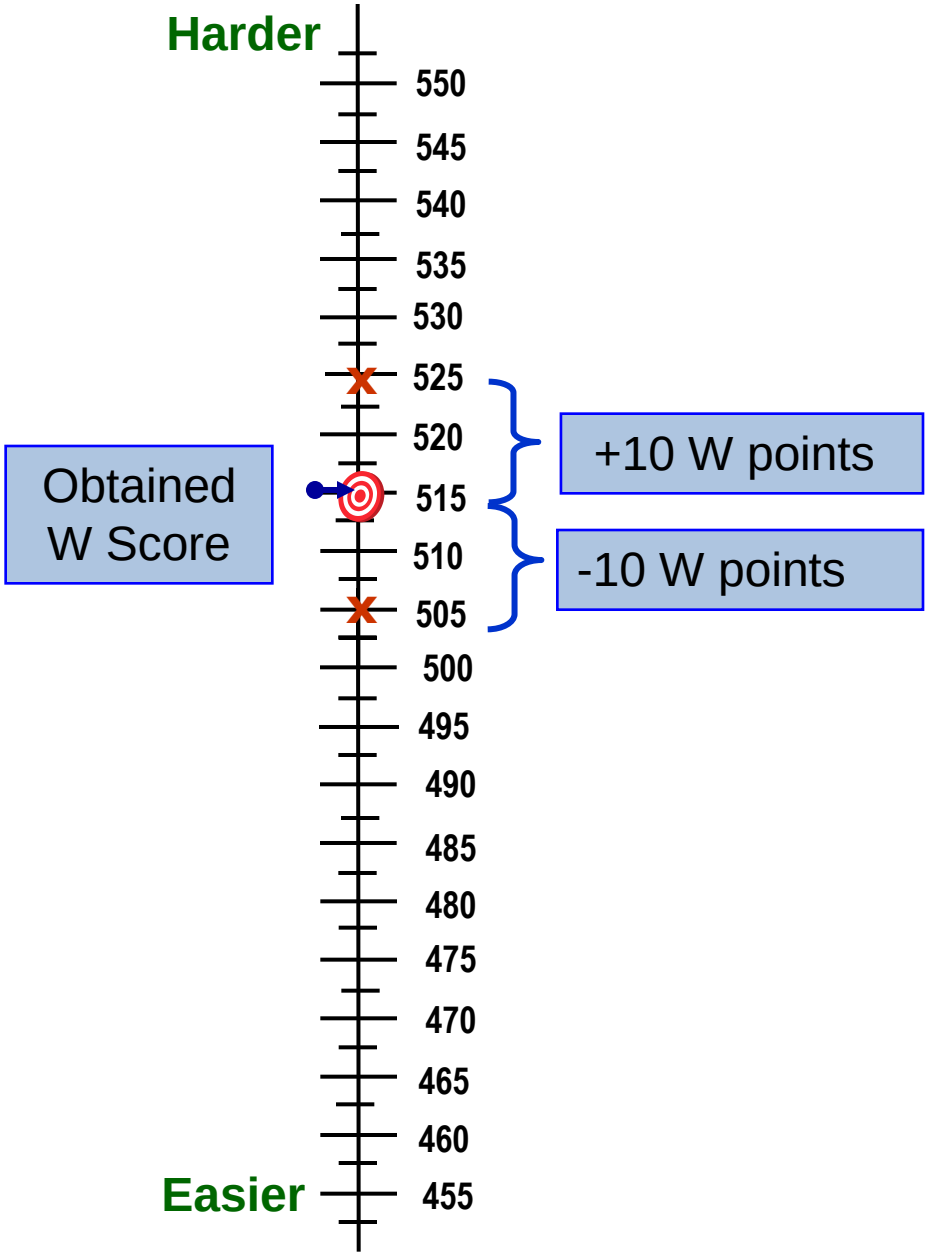
- **Developmental zones (on COG tests)**
  - **Similar to "zone of proximal development"**
  - **Represents the easy to difficult zone**
- **Instructional zones (on ACH tests)**
  - **Indicates independent, instructional, and frustration levels on a task**
- **Uses W scale to create range around examinee's obtained score (+/-10 W points)**

© Walter Howe September 2014 - QUT

Developmental or Instructional Zones

Created by adding and subtracting 10 W points to/from the person's obtained W score.

+10 = Frustration Level
-10 = Independent Level



© Walter Howe September 2014 - QUT

Relative Proficiency Index (RPI)

- Provides a method of operationalising differences or the gap between one student's score and that of most others who are at mastery level(90% proficient)
- Gives insight into how a student manages material that most others at that age/grade can manage
- Can show "closing the gap" (W score just progress).
- Based on W Diff from 20 W points below Ref W – expressed as the 90% proficiency level.

© Walter Howe September 2014 - QUT

Understanding RPIs

- RPIs are expressed as a fraction with the denominator fixed at 90. The numerator indicates the examinee's proficiency on that task and can range from 0-100.

- 90/90: Examinee has average proficiency on task and is at Ref W level.

© Walter Howe September 2014 - QUT

W Diff Scores & Associated RPIs

The RPI predicts how successful the person will be on a task at the level of difficulty at which average peers are 90% successful.

W Diff	RPI	W Diff	RPI
>28	100/90	-1	89/90
+28	99/90	-2	88/90
+20	99/90	-3	87/90
+15	98/90	-4	85/90
+14	98/90	-5	84/90
+13	97/90	-6	82/90
+12	97/90	-7	81/90
+11	97/90	-8	79/90
+10	**96/90**	-9	77/90
+9	96/90	**-10**	**75/90**
+8	96/90	-15	63/90
+7	95/90	-20	50/90
+6	95/90	-24	39/90
+5	94/90	-30	25/90
+4	93/90	-35	16/90
+3	93/90	-40	10/90
+2	92/90	-45	6/90
+1	91/90	-68	1/90
0	**90/90**	<68	0/90

© Walter Ho

RPI	Instructional Level
96/90 to 100/90	Independent
76/90 to 95/90	Instructional
75/90 and below	Frustration

Sam's RPI of 21/90 on the Phoneme/Grapheme cluster indicates that on similar tasks, in which the average fourth-grade student demonstrates 90% proficiency, Sam demonstrates 21% proficiency. Sam's knowledge of phoneme-grapheme correspondence and spelling patterns is very limited.

Monitoring Progress

- Norm-referenced tests like the WJ III are not designed to be used as frequent progress-monitoring tools
- Level 3 information in the WJ III helps document progress over time (closing the gap)
- W scores are best metric for documenting change
- Relative standing may not change (SS/PR) even if raw score increases

© Walter Howe September 2014 - QUT

Case Study – Elise

- Year 7
- Eldest of two girls. Father: driver; mother: hair dresser
- Reading Recovery Year 1. Support Teacher Year 3. Some home tutoring (high school student)
- High School entry screening indicated problems. Support Teacher working in lowest maths group concerned – some ST help this year

© Walter Howe September 2014 - QUT

Case Study – Elise

- **YARC – Supplementary Level**

SWRT: RS 44	SS 79	PR 8
Rate:	SS 90	PR 25
Comp:	SS 74	PR 4
Accuracy:	SS 79	PR 8
Summary:	Low	

Mispronunciations 33%; Substitutions 150%; Refusals: 50%; Additions: 50%; Omissions 166.7%.

© Walter Howe September 2014 - QUT

Case Study – Elise

- **WJ III Achievement Tests**

Reading Fluency:	SS 82	AE 9.11	RPI 65/90
Passage Comp:	SS 66	AE 7.4	RPI 14/90
Reading Vocab:	SS 78	AE 8.9	RPI 39/90
Word Attack:	SS 88	AE 8.10	RPI 47/90
Spelling:	SS 80	AE 9.	RPI 36/90
Picture Vocab:	SS 88	AE 9.7	RPI 64/90
Understanding Directions:	SS 96	AE 11.3	RPI 86/90

© Walter Howe September 2014 - QUT

Elise – Interventions?

- Text to Speech accommodations (and vice versa)
- Improve reading fluency – NIM; rereading
- Develop word attack/phonic skills (Corrective Reading; MultiLit etc)
- Build Vocabulary – morphological knowledge (maybe Morphological Spelling)
- Teach written comprehension skills – self monitoring techniques (Click & Clunk. HHH - Here; Hidden; Head. KWLS – Know; Want to know; Learned; Still need to learn.
- Reading practice – Rip Rap Books etc

© Walter Howe September 2014 - QUT

Case Study 2

- See hand outs (Year 3 girl September 2015)